Indiana Epidemiology NEWSLETTER



Epidemiology Resource Center 2 North Meridian Street, 3-D Indianapolis, IN 46204 317/233-7416

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Theme for 2003

Stigma and Discrimination Live and Let Live

World AIDS Day is celebrated worldwide on December 1st each year.

Jerry Burkman, R.N., M.P.H. ISDH HIV/STD Division

World AIDS Day has a special place in the history of the AIDS pandemic. Since 1988 December 1st has been a day bringing messages of compassion, hope, solidarity and understanding about AIDS to every country in the world. World AIDS Day emerged from the call by the World Summit of Ministers of Health on Programmes for AIDS Prevention in January 1988 to open channels of communication, strengthen the exchange of information and experience, and forge a spirit of social tolerance. Since then, World AIDS Day has received the support of the World Health Assembly, the United Nations system, and governments, communities and individuals around the world. Each year, it is the only international day of coordinated action against AIDS.

Even though it is still called "World AIDS Day", it focuses on both HIV infection and it's most life threatening stage, AIDS. HIV is a retrovirus that is 1/10,000 of a millimeter in diameter. It replicates and destroys the immune system defenses of those infected. When the immune system is sufficiently compromised opportunistic infections are able to multiply and can cause severe illness, incapacitation, and even death.

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History of HIV and AIDS (HIV disease)

For a disease, HIV disease has had a short history, but worldwide impact. The first report of AIDS was 22 years ago. At that time the epidemic was largely among men who have sex with other men. The causative virus was identified in 1984 and by 1985 testing was available for the nation's blood supply, Rock Hudson died of AIDS, and Ryan White started his fight to attend school even though he was infected with the virus. Most diagnoses were made after the immune system was devastated. Death was the natural outcome within a couple of years.

By 1987 azidothymidine (AZT) was available for treatment and prolonged life. In 1995 pregnant women began taking AZT to reduce the incidence of vertical transmission from mother to child from 25-30% to 2-4% today. In 1996 Highly Active Antiretroviral Therapy (HAART) became available. This, along with other treatments and treatment plans, has prolonged life and the quality of life. Meanwhile, the disease has spread to include the entire world. The treatments are not available to most of those infected due to infrastructure, logistics, medical care, or cost. Treatment and death are related worldwide: the more treatment the less death. In 1999 vaccine trials began. In 2003 there is no cure. **There is only prevention.**

HIV disease impacts most areas of human life. It impacts family income, life expectancy of the head of the household, mothers and wage earners. It takes a toll on educators and education, health care providers and the health care system in quality and quantity, and economic enterprises by weakening economic activity and production.



The Red Ribbon is an international symbol of AIDS awareness that is worn by people all year round and particularly around World AIDS Day to demonstrate care and concern about HIV disease and to remind others of the need for their support and commitment. The red ribbon started as a "grass roots" effort, and as a result there is no official red ribbon, and many people make their own.

Worldwide AIDS

Worldwide there are approximately 42 million people living with HIV disease (2 million more than a year ago): 38.6 million adults, 3.2 million children under 15 years of age, and 19.4 million women. More than 5 million were infected in 2002 and 2 million were women. More than 63 million have been infected. There are more than 14,000 people infected with HIV every day. More than 3 million died with AIDS in 2001 and more than 21.8 million have died worldwide. There have been over 14 million children orphaned due to the parents dying with HIV disease.

The world's poorest countries host 95% of the world's AIDS cases. In sub-Saharan Africa alone there are 29.4 million people living with HIV disease with 3.5 million becoming infected in 2002. In several southern African countries 1 in 5 adults is infected with HIV. This area has more women than men (58%) infected. In 2002 2.4 million people died of HIV disease.

Africa is the area of the world that has been the most impacted by the disease, but today Eurasia is facing a massive epidemic. Eurasia has 5/8 of the world population and an unfolding epidemic with 7 million infected with HIV by 2001. It took less than 10 years for sub-Saharan Africa to go from 7 million to 25 million. Especially hard hit are Russia, India, and The People's Republic of China.

The most frequent mode of transmission in the world now is heterosexual contact. The most frequent in the United States is still men who have sex with men, but heterosexual transmission is gaining. Even though there is no treatment, there are prevention techniques. The most common ones being sexual abstinence, monogamous sexual relationships with non-HIV infected partners, using condoms with every sexual encounter, not sharing needles, and using clean needles for injecting drugs.

United States AIDS and HIV

As of the end of 2002, 886,575 people had been diagnosed with AIDS in the United States and reported to the Centers for Disease Control and Prevention (CDC). Since HAART became widespread during 1996, trends in AIDS incidence have become less reflective of underlying trends in HIV transmission due to less progression to the stage of AIDS. To better monitor patterns of HIV diagnosis, most states (49) have implemented HIV surveillance, some quite recently. Indiana began HIV surveillance in the late 1980s.

There are 49 states that report HIV infections (all stages prior to AIDS) but only 35 states report name and other identifying information, so it is difficult to determine how much duplication there is in the case totals report. It is estimated that 281,931 people are currently living with HIV disease. For reporting of HIV and AIDS, American Samoa, Guam, Mariana Islands, and Virgin Islands are included because they also report to the CDC.

During the 1990s, the epidemic shifted steadily toward a growing proportion of AIDS cases in blacks and Hispanics and in women, and toward a decreasing proportion in men who have sex with men, although this group remains the largest single infected group. Blacks and Hispanics, among whom AIDS rates have been markedly higher than among whites, have been disproportionately affected since the early years of the epidemic. In 2002 the rate per 100,000 population of diagnoses of AIDS was 58.7 for Blacks, was 58.7 and19.2 for Hispanics and 5.9 for whites. In 2002 adult women were 26% of the reported cases of AIDS with a rate of 8.8 per /100,000 population while adult men had a rate of 26.4/ per 100,000 population.

The most frequent mode of transmission or risk factor in the United States is still men who have sex with men. Cumulatively they have contributed 45% of the cases of AIDS. Heterosexual exposure to an infected person was 100,071 or 12% cumulatively and 7,953 or 18% in 2002. Other modes for 2002 were: injecting drug use, 7,502 or 17%; men who have sex with men and inject drugs, 1,510 or 3%; hemophilia or a coagulation disorder, 90 or less than 1%; a blood transfusion or a tissue transplant, 265 or 1%; and those that have not identified their risk factor, 11,927 or 27%.

The age groups most frequently reported in 2002 were the 25-54 year olds with 36,574 or 87% of the diagnoses. There were 1,638 reports of AIDS in the 15-24 year age group. Those that have been diagnosed with the most severe stage of HIV disease, AIDS, while in their 20's were probably infected in their teenage years.

There have been 501,669 deaths with HIV disease in the United States.

Indiana AIDS

A complete breakdown of HIV and AIDS data is available by selecting quarterly reports and then October 2003 at www.statehealth.in.gov/programs/hivstd/index.htm.

As of June 30, 2002, there have been 7,180 Hoosiers reported with AIDS.

Cumulative AIDS numbers have increased at about the same rate as the U.S. numbers but with different distribution among the populations. In Indiana males continue to represent the majority of cases, with 6,333 or 88% of all reports of AIDS. In 2002 males had decreased to 83%. In the first 6 months of 2003 males accounted for 80% of the reports. The cumulative number of females is 847 or 12%. Females are increasing at a steady but slow rate.

White, non-Hispanic continues to be the most frequently reported race and ethnicity combination, with a cumulative total of 4,873 or 69% through June 2003. In 2002 whites accounted for 53% of reports of AIDS and in the first 6 months of 2003 whites accounted for 56%. The Blacks, non-Hispanic race/ethnicity combination, continues to be disproportionately represented. Blacks report 1,920 or 27% of all reports of AIDS. In 2002 blacks accounted for 39% of reports of AIDS and 40% in the first 6 months of 2003. Blacks represent 8.2% of the population of Indiana. Hispanics of all races are also disproportionately represented. Hispanics represent about 3.5% of the population of Indiana and 244 reports of AIDS, or 3.5% cumulatively. However, in 2002 the percentage was 7.1%. The other races and ethnicities represent less than 1% of the AIDS cases.

The most frequent mode of transmission or risk factor in Indiana is still men who have sex with men. Cumulatively they represent 62% or $4{,}413$ cases. In 2002 it was 50% and in the first 6 months of 2003 it was 46%. This is slightly higher than for the U.S. The percentages for other modes of transmission were as follows: men who have sex with men and inject drugs, 25 (5%); heterosexuals who inject drugs, 55 (11%); Hemophilia or coagulation disorders, 1 (<1%); heterosexual contact with an infected person, 80 (17%); and blood transfusions or tissue transplants, 3(<1%).

There were 15% of the reports of AIDS that did not include a risk factor. This affects the percentage of all other factors. This represents a large number of people who cannot or will not disclose the mode of transmission of the virus. Without this disclosure it is more difficult to provide effective prevention assistance. Without effective preventative interventions there will be further transmission of the virus to other people.

The age groups most frequently reported in 2002 were the 30-39 year olds and the 40-49 year olds, both with 172 or 36% of cases. There were also 172 (36%) in the 40-49 age group. There were 51 (11%) diagnosed in the 20-29 year age group, and 4 (<1%) in the pediatric and adolescent years of 0-19. Adults over 50 have been diagnosed with AIDS 83 times or 17% of the total for Indiana. The age groups did not change significantly in 2002 reports except for those over 50 that climbed to 17% from 11% in 2001.

At the end of June 2002 there were 3,412 people living with AIDS in Indiana. There were an additional 3,732 people living with HIV infection. There were also 342 children who were born to HIV infected mothers and have either been determined not to be infected or it has not yet been determined.

Indiana HIV Infection (HIV)

In Indiana, males continue to constitute the majority of reports, 348 or 79% of all reports of HIV in 2002. In the first 6 months of 2003 males had decreased to 75% of the reports of HIV. The 2002 number of females was 91 or 21% of cases. Females have increased to 25% in the first 6 months of 2003.

White, non-Hispanic continues to be the most frequently reported race and ethnicity combination with 238 or 54% reported in 2002. In the first 6 months of 2003 whites accounted for 55%. The Blacks, non-Hispanic race/ethnicity combination continues to be disproportionately represented. In 2002 blacks accounted for 40% of reports of HIV and 39% in the first 6 months of 2003. Blacks represent 8.2% of the population of Indiana. Hispanics of all races are also disproportionately represented. Hispanics represent about 3.5% of the population of Indiana. In 2002, 4% of reports were in Hispanics, and in the first 6 months of 2003, it was 6%. The other races and ethnicities represent less than 1% of the HIV reports.

The most frequent mode of transmission or risk factor in Indiana is still men who have sex with men. They represented 51% or 225 cases in 2002. In the first 6 months of 2003 it was down to 39%. It is unclear if this decrease/reduction will continue in the future. In 2002 other modes of transmission were: men who have sex with men and inject drugs, 19 (4%); heterosexuals who inject drugs, 26 (6%); Hemophilia or coagulation disorders, none; heterosexual contact with an infected person, 73 (17%); and blood transfusions or tissue transplants, 2 (<1%).

The age groups most frequently diagnosed in 2002 were the 30-49 year olds with 184 or 42%. There were 127 (29%) diagnosed in the 20-29 year age group and 29 (7%) in the pediatric and adolescent years of 0-19. Adults over 50 have been diagnosed with HIV 20 times or 5% of the total for Indiana. It appears that many people are not being diagnosed until they have been infected for several years. From 2000 through June of 2003 reports of HIV were within 3 months of a diagnosis of AIDS for 33% of the reports. This implies that HIV was being spread during the previous years of infection and that treatment and a productive life are more difficult at the point of illness.

Deaths

In Indiana there have been 4.033 people die with HIV disease. This is 36% of those reported with HIV disease.

Prevalence of HIV disease in Indiana

Each county in Indiana has had a resident diagnosed with HIV disease. The counties with over 100 infected people living in the county as of June 30 2003 include, in descending order of the number of persons: MARION, LAKE, ALLEN, ST. JOSEPH, VANDERBURGH, VIGO, MADISON, MONROE, LA PORTE, CLARK, PORTER, ELKHART, DELAWARE, and HAMILTON.

The following is a table of those living with HIV disease in Indiana by gender, race/ethnicity, and selected modes of transmission.

Table 1. Living with HIV disease in Indiana - June 30, 2003

	Number	Percentage
Gender		
Male	6,339	81%
Female	1,487	19%
Race/Ethnicity		
White	4,698	60%
Black	2,699	35%
Hispanic (all races)	377	5%
Risk Factor		
Men who have sex with men (MSM)	4,059	52%
Injecting drug user (IDU)	816	10%
MSM and IDU	439	6%
Heterosexual contact with HIV infected person	1,190	15%
Not able to identify/report	817	10%

New developments

New reports of HIV infection do not necessarily reflect HIV incidence, (i.e., new infections). The monitoring of new infections, not new diagnoses, is critical in evaluating progress toward the goal of reducing the number of new HIV infections by half by 2005. One method for estimating HIV incidence is to apply the **Serologic Testing Algorithm for Recent HIV Seroconversions (STARHS)** to serologic specimens from new HIV diagnoses. Indiana has been granted funding to work with other states and CDC to implement STARHS. A detuned assay of serologic specimens can identify infections that are older than about 6 months. If the specimen is not positive for HIV by this method the infection is recent. A timeline for implementation is 2004.

In November 2002, the U.S. Food and Drug Administration has approved a **new rapid HIV diagnostic test** kit that provides results with 99.6% accuracy in as little as 20 minutes. It uses less than a drop of blood and quickly and reliably detects antibodies to HIV-1. It can be stored at room temperature, and requires no specialized equipment. It is called The OraQuick Rapid HIV-1 Antibody Test and is manufactured by OraSure Technologies, Inc. A positive screening test result must be confirmed by additional specific approved test. It has not been approved for use by blood banks or plasma collection centers. It is not available for home use.

World AIDS Day Activities

There are numerous World AIDS Day activities around Indiana between now and December 1st. Check the local health department and AIDS Service Organization.

AIDS Ministries in Elkhart is having a church service at Agape Missionary Baptist Church at 5:00pm

Goshen College World AIDS Day Community Awareness Day is December 1st 7-9pm.

Notre Dame is having HIV testing and a presentation

East Central Indiana AIDS Task Force out of Jay County is celebrating from November 22nd through December 9th. November 22 – Agency Open House and informational sharing with the community; November 25th the mayor of Portland is signing a proclamation of AIDS Awareness Week from December 1-7, 2003; November 30th – Interfaith Declaration with community churches; December 1-5 – AIDS Awareness and Education at Jay County High School; December 4-9 –Ball State University will display panels from the AIDS Memorial Quilt in the Student Union Hall.

AIDS Ministries/AIDS Assist in South Bend will host a youth event with Indiana University of South Bend's Office of Campus Diversity on November 29th from 9:00am until 2:00pm.

The Circle City HIV/AIDS Coalition will observe World AIDS Day on December 1st at 6:00pm at the Jesus Metropolitan Community Church. Panels of the AIDS Memorial Quilt will be on display. Reception follows. Additional information and resources may be found at:

http://www.avert.org/

http://www.cdc.gov/hiv/stats/hasrlink.htm

http://www.statehealth.in.gov/programs/hivstd/index.htm

http://www.kff.org/worldaidsday

http://www.unaids.org

http://www.worldaidsday.org

HIV remains a highly stigmatized condition. HIV related discrimination is widespread and worldwide. Discrimination affects the quality of life of people with HIV and makes care and prevention efforts more difficult as people are alienated from testing, treatment, and prevention services. This can also lead to people with HIV losing their friends, jobs, families, and homes.

Pneumococcal Serotyping in Indiana

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In February 2000, a seven-valent **pneumococcal conjugate vaccine (PVC7)** was licensed for use in infants and young children less than five years of age. Pneumococcal illness, caused by the bacterium *Streptococcus pneumoniae*, is a leading cause of serious illness among infants worldwide and has been the most frequent cause of pneumonia, bacteremia, sinusitis, and acute otitis media (AOM). In the United States, prior to the licensure of the vaccine, *S. pneumoniae* caused approximately 17,000 cases/year of invasive disease among children less than five years of age including 700 cases of meningitis and 200 deaths.

Knowledge of the distribution of pneumococcal serotypes is fundamental to evaluating the potential impact of a pneumococcal vaccine. Currently, 90 serotypes of *S. pneumoniae* have been identified on the basis of antigenic differences in their capsular polysaccharides. The majority of serotypes cause serious disease, yet a limited number of serotypes cause the majority of invasive pneumococcal infections. In the United States, the seven most common serotypes isolated from blood or CSF of children less than 6 years of age account for 80% of infections. Those seven (4, 6B, 9V, 14, 18C, 19F and 23F) are the serotypes included in the currently licensed pneumococcal conjugate vaccine. According to the 2002 National Immunization Survey Data, 40% of Indiana's two-year-old children have received 3 or more doses of PCV7. Recent licensure (2000) and shortages of PCV7 have limited the coverage rate for this vaccine.

The Indiana State Department of Health Special Reference Bacteriology Laboratory began serotyping invasive isolates in children less than five years of age in January of 2002. As of October 31, 2003, 47 isolates have been serotyped. Of those 47, 21 were in cases occurring in 2002 (out of a total of 117 total cases reported in the less than 5 year old age group) and 26 (out of 53 cases reported thus far in 2003) occurred in 2003. Of those 47, 15 (32%) were of serotypes that are contained in the vaccine. Of those 15 cases, 2 had received one dose of vaccine. One of these 2 cases, one was 3 years of age when infected and had received vaccine after 15 months of age, which would be considered appropriately immunized. The other vaccinated case was 10 months of age at the time of infection, but had received only one dose of vaccine. Infants should receive their third dose of PCV7 when they are 6 months of age. The isolate identified in both of these cases was 6B. See Table 1 for the frequency of isolates that were of serotypes contained in the vaccine.

Table 1. Frequency of *S. pneumoniae* isolates of vaccine serotype by Age Group Indiana, January 2002- October 2003

Age	Serotype 4	Serotype 6B	Serotype 9V	Serotype 14	Serotype 18C	Serotype 19F	Serotype 23F
< year	1	1*	0	2	1	2***	0
1 year	0	1	0	0	2***	0	0
2years	0	1	0	0	0	0	0
3years	1	1**	0	1	1	0	0
4years	0	0	0	0	0	0	0
Total	2	4	0	3	4	2	0

^{*} a ten-month-old with one dose of vaccine at 2 months of age

Thirty-two additional isolates submitted to the ISDH Laboratory were found to be non-vaccine serotypes. The frequency of each non-vaccine serotype is found in Table 2.

Table 2. Frequency of S. pneumoniae isolates of non-vaccine serotype Indiana, January 2002- October 2003

Serotype	Frequency
6A	8
9A	3
15	3
33F	3
19A	2
7F, 11A, 12B, 12F,	1 isolate for each of the
15C, 22F, 23A, 33	serotypes
Other Non Vaccine	5
Types (NVT); specific	
serotype not identified.	
Total	32

The Respiratory Branch at Centers for Disease Control and Prevention (CDC) is tracking invasive pneumococcal cases that are considered to be vaccine failures. The CDC will verify the serotype identification obtained by the ISDH Laboratory, as well as record host conditions that may increase the risk of severe pneumococcal disease, and monitor for vaccine lots that may be less effective. The ISDH sends all isolates meeting specific criteria to the CDC for this vaccine failure study project. **Therefore, it is very important that all laboratories submit invasive pneumococcal isolates collected from infants less than five years of age to the ISDH Special Reference Bacteriology Laboratory.** The ISDH will provide a report upon request for each isolate submitted. If laboratories have questions about submission of specimens, they may call the laboratory at 317-233-8040.

^{**} a three-year-old with 1 dose of vaccine after 15 months of age

^{***} unknown vaccine history in one of the two cases noted for 18C and 19F

In conclusion, cases for which isolates have been submitted are either 1) a non-vaccine serotype (17 of these 32 cases had received at least one dose of vaccine) and thus, not likely to be prevented by vaccination, or 2) an isolate of a vaccine type which has been obtained from an infant who was not vaccinated, with the exception noted earlier of the two cases that had received one dose of vaccine each. Only one of those two cases had been vaccinated according to a recommended schedule. This data is very encouraging, particularly in light of the PCV7 shortages that have occurred within the first 2-3 years following licensure of the vaccine. As two-year-old pneumococcal vaccination coverage increases from the 40% rate noted in 2002, incidence of disease will be decreased. More data and more isolates are needed to further monitor the effectiveness of the vaccine and complete the vaccine failure project at the Respiratory Branch at CDC.

Aseptic Meningitis Update

Thomas Kerr BS, RN Epidemiology Resource Center

During March 2003, several state public health departments noted an increase in reports of aseptic meningitis, and as of August 7, seven states (Arizona, California, Georgia, Idaho, Oregon, South Carolina, and Texas) had reported outbreaks associated with either Enterovirus 9 or Enterovirus 30¹.

The Indiana State Department of Health (ISDH) has noticed an increase in the number of cases reported when compared to the previous years. Table 1 shows the number of cases reported per year in Indiana from 2001 to October 28, 2003.

Table 1. Aseptic Meningitis, Total, Confirmed and Probable Cases, Indiana, 2001-October 2003

Year	Total	Confirmed	Probable
2000	240	*	*
2001**	505	*	*
2002**	353	149	204
2003** (through October 28)	226	103	123

^{*} The Confirmed and Probable case definitions were not used prior to 2002.

One of the difficulties with reporting aseptic meningitis is that it does tend to peak in terms of activity at almost the same time of the year as mosquito-transmitted diseases. During an August Centers for Disease Control and Prevention (CDC) telebriefing, Dr. Stephen Ostroff, Deputy Director of the CDC National Center for Infectious Diseases, noted that although West Nile virus is not considered a cause of aseptic meningitis, the similar seasonal occurrence can cause confusion when determining the cause of illness². It is critical that public health investigations collect enough information to differentiate cases of West Nile virus from cases of aseptic meningitis. The ISDH has developed a form to assist local health departments in investigating suspected cases of aseptic meningitis.

^{**} Provisional data.

Background on Aseptic Meningitis

Viruses are the most common etiology, with Entero viruses accounting for over half of cases reported. Other causes include mycobacteria, Listeria, syphilis, Leptospira, Toxoplasma, fungi, meningeal carcinomatosis and meningeal reaction to an inflammatory destructive process or medication. Early etiologic diagnosis of aseptic meningitis helps to avoid unnecessary antibiotic treatment and additional testing.

Aseptic meningitis illness is self-limiting and patients tend to recover in approximately 1 week. Treatment is usually symptomatic and no specific prevention or control measures are available for non-polio entero viruses including E9 and E30. Adherence to good hygienic practices, such as frequent and thorough hand washing (especially after diaper changes), disinfection of contaminated surfaces by household cleaners (e.g., diluted bleach solution), and avoidance of shared utensils and drinking containers, is recommended to help interrupt transmission.

Reporting and Investigation Aseptic Meningitis Cases

410 IAC 1-2.3(84) indicates that aseptic meningitis is to be reported within 72 hours. Many individuals are not necessarily hospitalized, and therefore, the information necessary to make a definitive diagnosis is not collected. Thus, completing the correct form with the requested information is not only necessary, but is also crucial in determining the classifications of a suspected aseptic meningitis case.

Reporting facilities should not complete the Suspect Aseptic Meningitis form 51001(8-02). This form is designed for use by local health departments to aid in their investigations of suspect cases. Rather, suspected cases of aseptic meningitis should be submitted by physicians and hospitals to their local health department on the Confidential Report of Communicable Diseases SF form 43823, the same form used for other reportable diseases. Upon completion of the follow-up investigation, local health departments attach the Confidential Report of Communicable Diseases form to the Suspect Aseptic Meningitis form and send the completed forms to ISDH, where the suspect case is then classified.

As stated above, certain information is helpful to classify suspected aseptic meningitis cases. Useful information in reporting includes clinical presentation of the patient and laboratory findings. Cerebral spinal fluid (CSF) analysis is particularly useful.

The ISDH classifies each report of aseptic meningitis into one of the following four categories:

1. Confirmed Case

- 1) A virus isolated in CSF whether or not symptoms are reported.
- 2) Symptoms are present and CSF WBC>5/cc; lymphocytes predominate.
- 3) Symptoms (fever, headache, photophobia, may or may not have stiff neck.
- 4) A virus isolated in other body fluid and CSF WBCs >5, lymphocytes predominate.
- 5) CSF WBCs >5, lymphocytes predominate.

2. Probable Case

- 1) Symptoms (fever, HA, photophobia, may or may not have -stiff neck), CSF WBC >5/cc, elevated protein (if done).
- 2) A report with symptoms and no bacterial growth in the CSF and no differential (i.e. WBCs, Protein)
- 3) A report with symptoms and no bacterial growth from CSF.
- 4) MD report no symptoms listed, CSF WBC>5 and no bacterial growth

3. Suspect Case

- 1) Provider report stating aseptic meningitis with no other information included
- 2) A report with symptoms but no CSF
- 3) MD report, no symptoms listed, CSF WBC>5

4. Not a Case

- 1) A report with symptoms and CSF WBCs less than 5/cc
- 2) A report with symptoms and normal glucose and/or protein
- 3) WBCs greater than 10 (with or without antibiotics prior to test) and PMNs predominate.
- 4) Bacteria isolated in CSF

Notes:

- Headache and fever are often symptoms.
- Stiff neck only occurs in approximately 50% of cases.
- No bacterial growth does not mean that the case is not bacterial.
- Usual viral WBC is >5; Glucose and Protein around 50; and WBCs are lymphocytic.
- Usual bacterial-WBCs are mostly polys.
- Early viral meningitis (symptoms less that 24-48 hours) CSF of bacterial and viral pleocytosis is similar with PMNs predominating (polys). After 48 hours, lymphocytes predominate in viral.

Web Resources on Aseptic Meningitis

http://www.in.gov/isdh/publications/2002communicable_disease_ref_guide/index.htm http://www.in.gov/isdh/healthinfo/viral%20meningitis.htm http://www.cdc.gov/ncidod/dvrd/virlmen.htm

References:

Outbreaks of Aseptic Meningitis Associated with Echoviruses 9 and 30 and Preliminary Surveillance Reports on Enterovirus Activity --- United States, 2003. Retrieved October 27,2003 from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5232a1.htm

2	West Nile Virus in the United States. Retrieved October 26,2003 from:	
	http://www.cdc.gov/od/oc/media/transcripts/t030814.htm	

FDA and CDC Statement Concerning Rumors About Recalled Lot of Influenza Vaccine

Rumors have been circulating that the FDA has recalled a "contaminated" lot of flu vaccine. This is false. No contamination of any flu vaccine has been identified anywhere in the U.S., and the FDA has not recalled any lot of flu vaccine. Flu vaccine is routinely tested for safety, purity, and potency and all lots released have met these standards. As with any vaccine, flu vaccine is capable of causing some side effects, these are very rarely severe. Most side effects from flu vaccine are mild, such as arm soreness, redness or swelling where the shot was given, fever, or achiness. More serious reactions to the flu vaccine do occur, but they are rare.

While FDA and CDC are currently investigating several recent reports of possible significant allergic reactions to flu vaccine, it is important to note that the number and type of reactions reported to date are not unexpected. The reactions reported, not all of which may have been caused by the administration of vaccine, do not, at this time, suggest any problem with the flu vaccine. However, FDA and CDC will continue to investigate these and any other reports and will provide any further information as available.

While serious reactions to flu vaccine are rare, each year about 114,000 people in the U.S. are hospitalized and about 36,000 people die because of the flu. The flu vaccine is the best way a person can protect themselves and their loved ones against influenza. October and November are the best months to get vaccinated - however, vaccination in December or later still provides considerable protection.

For more information about influenza, go to http://www.cdc.gov/nip/Flu

Epidemiology Resource Center Communicable Disease Responsibilities

2 N. Meridian Street, 5-K Indianapolis, IN 46204 Fax: 317-234-2812

James Howell, DVM – Veterinary Epidemiologist 317-233-7272

jhowell@isdh.state.in.us

Animal Bites

Anthrax

Babesiosis

Bioterrorism Events

Dengue Fever

Encephalitis—arthropod-borne and primary

Ehrlichiosis

Hantavirus Pulmonary Syndrome

Leptospirosis

Lyme Disease

Plague

Psittacosis

O-Fever

Rabies—animal and human

Rocky Mountain Spotted Fever

Tularemia

Typhus

Toxoplasmosis

Julie Butwin, MSN – Chief Nurse Consultant 317-233-7825

jbutwin@isdh.state.in.us

- *Artificial Insemination Law
- *Emergency Responder Law

Hepatitis B/Hepatitis B pregnant women/perinatally exposed infant (surveillance: disease reports; case management of pregnant women and perinatally exposed infants handled by the ISDH Immunization Program)

Hepatitis D

Hepatitis, viral, unspecified

- *Infection Control
- *Infectious Waste Law
- *Methicillin Resistant Staph aureus (MRSA)
- *Tattoo and Body Piercing Law
- *Universal Precaution Law
- *Vancomycin Resistant Enterococcus (VRE)

Vancomycin Resistant Staph aureus (≥8µg/ml)

Thomas Kerr, BS – Chief Nurse Consultant 317-234-2804

tkerr@isdh.state.in.us

- *Communicable Disease Manual Coordinator
- *Employee Health Policy Advisor

Hansen's Disease (Leprosy)

Meningitis, Aseptic

Meningococcal Invasive Disease

- *Scarlet Fever
- *School Health Liaison

Staphylococcus aureus (except MRSA and

vancomycin resistant)

Streptococcus Group A Invasive Disease

Streptococcus Group B Invasive Disease

Toxic Shock Syndrome

Wayne Staggs, MS – Epidemiologist 317-233-7112

wstaggs@isdh.state.in.us

Diphtheria

Invasive Hemophilus influenzae type B (Hib)

Invasive Pneumococcal Disease

Measles

Mumps

Pertussis (whooping cough)

Polio

Rubella

Rubella, congenital syndrome

Smallpox

Tetanus

Varicella/shingles (hospitalization or death)

Pam Pontones, MA – Epidemiologist 317-233-7009

ppontones@isdh.state.in.us

*Amebiasis

Botulism

Campylobacteriosis

Cholera

Cryptosporidiosis

Cyclosporosis

E. coli infections

Foodborne outbreaks

*Giardiasis

Hemolytic Uremic Syndrome

Hepatitis A

Hepatitis E

Listeriosis

Salmonellosis

Shigellosis

Trichinosis

Typhoid Fever

*Vibriosis

Waterborne outbreaks

Yersiniosis

Reportable disease surveillance handled by other program areas:

HIV/AIDS:

HIV/STD Program, Jerry Burkman, (317) 233-7406

Hepatitis C:

HIV/STD Program, Cheryl Pearcy, (317) 233-8602

Sexually Transmitted Diseases:

HIV/STD Program, Jim Beall, (317) 233-7426

Tuberculosis:

Chronic Disease Program, Paul Britton, (317) 233-7545

Pediatric venous lead $\geq 10\mu g/dl$ in children ≤ 6 years of age:

Childhood Lead Poisoning Prevention, Nancy Cobb, (317) 233-1250

*Disease/conditions not reportable

Shawn Richards, BS – Epidemiologist 317-233-7740

srichard@isdh.state.in.us

*Community Acquired Pneumonia

Cryptococcal infections

*Fungal respiratory infections

Histoplasmosis

- *Influenza Pandemic Planning
- *Influenza Surveillance Coordinator

Legionellosis

*Respiratory Syncytial Virus (RSV)

Michael Wilkinson – Public Health Investigator 317-234-2827

- *Adult Immunization Coordinator
- *Cytomegalovirus (CMV)
- *Fifth Disease (Parvovirus B-19)
- *Hand, Food & Mouth Disease (Coxsackie)
- *International Travel

Malaria

- *Mononucleosis (Epstein-Barr virus)
- *Pediculosis (Lice)
- *Scabies

Yellow Fever

Centers for Disease Control and Prevention (CDC) Requests Information

Acute Encephalopathy Associated with Influenza Virus Infection in U.S. Children

Since the mid-1990s, several hundred cases of acute encephalopathy have been reported in Japanese children with influenza. These illnesses have been characterized by fever and rapid onset of encephalopathy, resulting in a high frequency of neurologic sequelae and mortality. Most of the children have had laboratory-confirmed evidence of influenza virus infection. Reports of influenza-associated encephalopathy have been uncommon in the United States.

To determine if a similar pattern of influenza-associated encephalopathy is occurring in the United States, the Centers for Disease Control and Prevention (CDC) is requesting information from health care providers on any patient with acute encephalopathy meeting the following criteria:

- < 18 years old</p>
- Altered mental status, or personality change in patient lasting > 24 hours and occurring within 5 days of the onset of an acute febrile respiratory illness
- Laboratory or rapid diagnostic test evidence of acute influenza virus infection
- Diagnosed in the United States

Please report any suspected cases to either Dr. Tim Uyeki (404-639-0277; tmu0@cdc.gov) or Dr. Niranjan Bhat (404/639-2893; nib9@cdc.gov) at CDC.

Influenza-associated Deaths in U.S. Children

CDC would like to receive reports about any deaths in patients < 18 years old, with evidence of influenza virus infection.

We would like the following information on fatal cases in the U.S.:

- Clinical summary with history of illness
- Laboratory results, including documentation of influenza virus infection
- Autopsy report if available

Please report any fatal influenza-associated pediatric cases to either Dr. Tim Uyeki (404-639-0277; tmu0@cdc.gov) or Dr. Niranjan Bhat (404/639-2893; nib9@cdc.gov) at CDC.



ISDH Data Reports Available

The ISDH Epidemiology Resource Center has the following data reports and the Indiana Epidemiology Newsletter available on the ISDH Web Page:

www.statehealth.in.gov/dataandstats/data and statistics.htm

Indiana Cancer Incidence Report (1990, 95,96, 97, 98)

Indiana Marriage Report (1995, 97, 98, 99, 2000)

Indiana Cancer Mortality Report (1990-94, 1992-96)

Indiana Mortality Report (1999, 2000, 2001)

Combined Mortality and Incidence in Indiana Report (1999) Indiana Natality Report (1998, 99, 2000, 2001)

Indiana Health Behavior Risk Factors Indiana Induced Termination of Pregnancy Report (1995-96, 97, 98, 99, 2000, 2001) (1998, 99, 2000, 2001)

Indiana Health Behavior Risk Factors (BRFSS) Newsletter Indiana Infectious Diseases Report (2000)

Indiana Hospital Consumer Guide (1996) Former Indiana Report of Diseases of Public Health

Interest (1996, 97, 98, 99) Public, Hospital Discharge Data

Indiana Maternal & Child Health Outcomes & Performance Measures (1988-97, 1989-98, 1990-99, 1991-2000, 1992-2001)

HIV Disease Summary

Information as of October 31, 2003 (based on 2000 population of 6,080,485)

HIV - without AIDS to date:

(1999, 2000, 2001)

341	New HIV cases from November 2002 through October 2003	12-month incidence	5.61 cases/100,000
3,749	Total HIV-positive, alive and without AIDS on October 31, 2003	Point prevalence	61.66 cases/100,000
AIDS c	ases to date:		
468	New AIDS cases from November 2002 through October 2003	12-month incidence	7.70 cases/100,000
3,551	Total AIDS cases, alive on October 31, 2003	Point prevalence	58.40 cases/100,000
7,350	Total AIDS cases, cumulative (alive and dead)		

REPORTED CASES of selected notifiable diseases

Disease	Oct	eported in tober Veek 40-44	January	nulative Cases Reported January - October MMWR Weeks 1-44	
	2002	2003	2002	2003	
Campylobacteriosis	40	49	425	444	
Chlamydia	1,876	1,545	14,656	14,378	
E. coli O157:H7	13	7	60	80	
Hepatitis A	3	6	40	62	
Hepatitis B	4	5	43	32	
Invasive Drug Resistant <i>S.</i> pneumoniae (DRSP)	9	11	142	130	
Gonorrhea	864	685	6,335	5,594	
Legionellosis	2	0	16	23	
Lyme Disease	2	1	20	19	
Measles	0	0	2	0	
Meningococcal, invasive	5	1	29	40	
Pertussis	23	6	114	56	
Rocky Mountain Spotted Fever	1	0	4	1	
Salmonellosis	77	55	485	517	
Shigellosis	18	20	97	147	
Syphilis (Primary and Secondary)	6	7	54	43	
Tuberculosis	19	17	106	113	
Animal Rabies	1 (bat)	5 (bats)	31 (30 bats, 1 skunk)	27 (26 bats, 1 raccoon)	

For information on reporting of communicable diseases in Indiana, call the *ISDH Epidemiology Resource Center* at (317) 233-7665.

Indiana Epidemiology Newsletter

The *Indiana Epidemiology Newsletter* is published by the Indiana State Department of Health to provide epidemiologic information to Indiana health professionals and to the public health community.

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